

**I claim:**

1. A digital photo frame comprising:
  - a storage unit for storing picture and music data;
  - a digital processing unit for processing picture and music data in said storage unit;
  - a display unit for displaying picture data processed by said digital processing unit and digital outer frame patterns of said digital photo frame;
  - a sound reception and playback unit used to receive sound and play music and convert the received sound into digital music data through said digital processing unit, said sound reception and playback unit being also used to store said digital music data into said storage unit and play music data processed by said digital processing unit;
  - a control software stored in said storage unit and executed by said digital processing unit, said control software being used to select a picture to be displayed from said storage unit and set a matching music for each picture and automatically play the matching music according to the displayed picture, said control software being also used to let a user select said digital outer frame pattern of said digital photo frame to be displayed; and
  - a control input unit letting a user be capable of operating said control software to control said digital photo frame, said control input unit being composed of at least more than one key located on said digital photo frame.
2. The digital photo frame as claimed in claim 1, wherein said storage unit is a flash memory.
3. The digital photo frame as claimed in claim 1, wherein said storage unit is a

memory card access device, which can access CF cards, MS cards, MMC cards, SM cards, SD cards and XD cards.

4. The digital photo frame as claimed in claim 3, wherein said memory card access device can access microdrives.
- 5 5. The digital photo frame as claimed in claim 1, wherein said storage unit comprises a read only memory, and said control software is stored in said read only memory.
6. The digital photo frame as claimed in claim 1, wherein said display unit is a liquid crystal display, a plasma display panel, an organic light emitting  
10 device or a field emission device.
7. The digital photo frame as claimed in claim 1, wherein said sound reception and playback unit is composed of a microphone and a loudspeaker.
8. The digital photo frame as claimed in claim 1, wherein said digital photo frame further comprises an I/O interface for file transmission with a  
15 computer.
9. The digital photo frame as claimed in claim 8, wherein said I/O interface is a universal serial bus.
10. The digital photo frame as claimed in claim 1, wherein said music data are of the WAV or MP3 format.
- 20 11. The digital photo frame as claimed in claim 1, wherein said picture data are of the JPEG or GIF format.
12. The digital photo frame as claimed in claim 1, wherein the matching music are said digital music data recorded by said sound reception and playback unit when displaying different pictures through said control software.
- 25 13. The digital photo frame as claimed in claim 1, wherein a user can select a

matching digital outer frame pattern for each picture through said control software, and said matching digital outer frame patterns can be automatically displayed according to displayed pictures.

14. A digital photo frame comprising:

- 5       a storage unit for storing picture and music data;
- a digital processing unit for processing picture and music data in said storage unit;
- a display unit for displaying picture data processed by said digital processing unit and digital outer frame patterns of said digital photo frame;
- 10      a sound playback unit used to play music data processed by said digital processing unit;
- a control software stored in said storage unit and executed by said digital processing unit, said control software being used to select a picture to be displayed from said storage unit and set a matching music for each picture
- 15      and automatically play the matching music according to the displayed picture, said control software being also used to let a user select said digital outer frame pattern of said digital photo frame to be displayed;
- a clock unit for generating the present time information, which can be displayed through said display unit; and
- 20      a control input unit letting a user be capable of operating said control software to control said digital photo frame.

15. The digital photo frame as claimed in claim 14, wherein said clock unit has an alarm clock function, and said clock unit can set a specific time for playing music through said sound playback unit.

25   16. The digital photo frame as claimed in claim 14, wherein said picture data

and said present time information can be simultaneously displayed on said display unit.

17. The digital photo frame as claimed in claim 14, wherein said present time information are displayed on said digital outer frame pattern to form part of said digital outer frame pattern.
18. The digital photo frame as claimed in claim 14, wherein said present time information are displayed in an analog or a digital form.
19. The digital photo frame as claimed in claim 18, wherein said present time information displayed in an analog form can be displayed above a picture displayed on said digital photo frame with said displayed picture as the background.
20. The digital photo frame as claimed in claim 14, wherein said digital photo frame further comprises a radio reception unit for selecting a radio channel through said control software and playing the radio through said sound playback unit.